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MEMORANDUM

TO: Nancy Riveland-Har
Remedial Project Manager
Cleanup Section 4, SFD-7-4

THROUGH: Rose Fong
ESAT Project Officer
Quality Assurance (QA) Office, PMD-3

FROM: Doug Lindelof
Data Review and QA Document Review Task Manager
Environmental Services Assistance Team (ESAT)

ESAT Contract No.: 68-W-01-028
Task Order No.: B01
Technical Direction No.: B0105091

DATE: May 13, 2002

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

SITE:	Omega Chem OU-2
SITE ACCOUNT NO.:	09 BC LA02
CERCLIS ID NO.:	CAD042245001
CASE NO.:	30205
SDG NO.:	Y0DZ0
LABORATORY:	A4 Scientific, Inc. (A4)
ANALYSIS:	Volatiles
SAMPLES:	18 Water Samples
COLLECTION DATE:	February 13, 14, 15, and 18, 2002
REVIEWER:	Santiago Lee, ESAT/LDC

The comments and qualifications presented in this report have been reviewed by the EPA Task Order Project Officer (TOPO) for the ESAT Contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment
cc: Ray Flores, CLP PO USEPA Region 6
Steve Remaley, CLP PO USEPA Region 9
ESAT File

CLP PO: [ ] FYI [X] Attention [ ] Action

SAMPLING ISSUES: [X] Yes [ ] No

Data Validation Report

Case No.: 30205 SDG No.: Y0DZ0
Site: Omega Chem OU-2
Laboratory: A4 Scientific, Inc. (A4)
Reviewer: Santiago Lee, ESAT/LDC
Date: May 13, 2002

I. Case Summary

SAMPLE INFORMATION:

Samples:	Y0DZ0 through Y0E06 and Y0E28
Concentration and Matrix:	Low Level Water
Analysis:	Volatiles
SOW:	OLC03.2
Collection Date:	February 13, 14, 15, and 18, 2002
Sample Receipt Date:	February 15, 16, and 19, 2002
Extraction Date:	Not Applicable
Analysis Date:	February 21, 2002 through March 2, 2002

FIELD QC:

Trip Blanks (TB):	Y0DZ5, Y0DZ8, Y0E03, and Y0E04
Field Blanks (FB):	Not Provided
Equipment Blanks (EB):	Y0E01
Background Samples (BG):	Not Provided
Field Duplicates (D1):	Y0DZ6 and Y0DZ7

METHOD BLANKS AND ASSOCIATED SAMPLES:

VBLK75:	Y0E28, Y0DZ1, Y0DZ9, Y0E03, Y0E04, Y0DZ1DL, Y0DZ8, Y0E01, and Y0DZ9DL
VBLK76:	Y0DZ5, Y0DZ3DL, Y0DZ4DL, and Y0E06DL
VBLK77:	Y0DZ7DL, Y0DZ0DL, Y0DZ6DL, Y0E00DL, Y0DZ2DL, Y0DZ0, and Y0DZ2
VBLK78:	Y0E05DL, Y0E05, Y0E00, Y0DZ3, and Y0DZ6
VBLK82:	Y0DZ4 and Y0DZ4MS
VBLK83:	Y0E02, Y0E02DL, Y0DZ4MSD, and Y0E06
VBLK84:	Y0DZ7 and VHBLK01

TABLES:

1A:	Analytical Results with Qualifications
1B:	Data Qualifier Definitions for Organic Data Review
2:	Calibration Summary

MS - Matrix Spike, MSD - Matrix Spike Duplicate, DL - Dilution

CLP PO ACTION:

None.

CLP PO ATTENTION:

1) Detected results for methylene chloride, toluene, and chloroform in several samples are qualified as nondetected and estimated (U,J) due to contamination in the method blanks and trip blank.

2) Detected results and quantitation limits for all target analytes in some samples are qualified as estimated (J) due to holding time problems.

3) Detected results and quantitation limits for several analytes are qualified as estimated (J) due to calibration problems.

4) Detected results and quantitation limits for several analytes are qualified as estimated (J) due to deuterated monitoring compound (DMC) recoveries outside QC limits.

SAMPLING ISSUES:

Detected results for chloroform in some samples are qualified as nondetected and estimated (U,J) due to contamination in trip blank Y0E03.

ADDITIONAL COMMENTS:

For sample Y0E00, area of the internal standard chlorobenzene-d5 (119796) exceeded the upper QC limit of 119642. Analytes were not qualified because the upper limit was exceeded by only 0.13%.

Tentatively identified compounds (TICs) detected in the samples are reported on the Form 1LCFs. Other than laboratory artifacts/contaminants (retention times = 9.0 and 14.1 minutes), TICs were detected in samples Y0DZ0 through Y0DZ4, Y0DZ6, Y0DZ8 through Y0E00, Y0E02, Y0E03, Y0E05 and Y0E28 (see attached Form 1LCFs).

This report was prepared in accordance with the following documents:

- ESAT Region 9 Standard Operating Procedure 901, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Volatile and Semivolatile Data Packages*,
- *USEPA Contract Laboratory Program Statement of Work for Low Concentration Organics Analysis,* OLC03.2, December 2000; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Low Concentration Organic Data Review*, June 2001.

II. Validation Summary

	Acceptable/Comment	
HOLDING TIMES	NO	C
GC/MS TUNE/GC PERFORMANCE	YES	
INITIAL CALIBRATIONS	NO	D, E
CONTINUING CALIBRATIONS	NO	D, F
LABORATORY BLANKS	NO	B
FIELD BLANKS	NO	B
DEUTERATED MONITORING COMPOUNDS (DMCs)	NO	G
MATRIX SPIKE/DUPLICATES	NO	H
INTERNAL STANDARDS	YES	
COMPOUND IDENTIFICATION	NO	L
COMPOUND QUANTITATION	YES	A, J, K
SYSTEM PERFORMANCE	YES	
FIELD DUPLICATE SAMPLE ANALYSIS	NO	I

III. Validity and Comments

A. The following results, denoted with an "L" qualifier, are estimated and flagged "J" in Table 1A.

- All results below the contract required quantitation limits

Results below the contract required quantitation limits (CRQLs) are considered to be qualitatively acceptable, but quantitatively unreliable, due to the uncertainty in analytical precision near the limit of detection.

B. The following results are qualified as nondetected and estimated due to method blank or trip blank contamination, and are flagged "U,J" in Table 1A.

- Methylene Chloride in samples Y0DZ2, Y0DZ7, Y0E02, Y0E06, and Y0DZ4MSD and storage blank VHBLK01
- Toluene in sample Y0E03
- Chloroform in samples Y0DZ3, Y0DZ4, Y0DZ6, Y0E02, Y0DZ4MS, and Y0DZ4MSD

Methylene chloride was found in method blanks VBLK77, VBLK83, and VBLK84 at concentrations of 0.3 μg/L, 0.6 μg/L, and 0.2 μg/L, respectively. Toluene was found in method blank VBLK75 at a concentration of 0.3 μg/L. Chloroform was found in the trip blank Y0E03 at a concentration of 3 μg/L. Results for the samples listed above are considered nondetected and estimated (U,J) and the quantitation limits have been increased according to the blank qualification rules presented below.

No positive results are reported unless the concentration of the compound in the sample exceeds 10 times the amount in any associated blank for the common laboratory contaminants or 5 times the amount for other compounds. If the sample result is greater than the CRQL, the quantitation limit is raised to the sample result (U,J). If the sample result is less than the CRQL, the result is reported as nondetected (U,J) at the CRQL.

Although not detected in the associated method blanks, methylene chloride has been commonly found in the field and in many laboratories. The user should note that the methylene chloride found in samples Y0DZ3 (0.2 μg/L), Y0DZ4 (6 μg/L at 10-fold dilution), Y0E05 (0.3 μg/L), and Y0DZ4MS (12 μg/L at 10-fold dilution) may be an artifact.

Although not detected in the associated trip blanks, chloroform has been commonly found in the field. The user should note that the chloroform found in samples Y0E05 (2 μg/L) and Y0E06 (11 μg/L) may be an artifact.

Although 1,2,3-trichlorobenzene was found in method blanks VBLK83 (0.5 μg/L) and VBLK84 (0.3 μg/L), no data are qualified because 1,2,3-trichlorobenzene was not found in any of the samples associated with these method blanks.

Although acetone was found in the trip blank Y0DZ5 at a concentration of 7 μg/L, no data are qualified because acetone was not found in the samples associated with this trip blank or was detected at concentrations exceeded ten times the amount in the trip blank.

A laboratory method blank is laboratory reagent water analyzed with all reagents, DMCs, and internal standards and carried through the sample preparation and analytical procedures as the field samples. The laboratory method blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

A trip blank is laboratory reagent water which is shipped from the laboratory to the field with the empty sample containers and back to the laboratory with the filled sample containers. A trip blank is intended to detect contaminants introduced during the transport of the samples to the laboratory, although any laboratory introduced contamination will also be present. Contaminants that are found in the trip blank which are absent in the laboratory blank could be indicative of a problem in transportation, storage, the bottle preparation procedure, or other indeterminate error.

C. Detected results and quantitation limits for the following analytes are qualified as estimated due to missed technical holding times, and are flagged "J" in Table 1A.

- All analytes except tetrachloroethene in samples Y0DZ7
- All analytes in samples Y0E02 and Y0DZ4MSD

These water analyses exceeded the 14-day 40 CFR 136 (Clean Water Act) technical holding times as shown below.

Sample	Date Collected	Date Analyzed	# of Days Exceeded
Y0DZ7	02/15/02	03/02/02	3
Y0E02	02/15/02	03/01/02	2
Y0E02DL	02/15/02	03/01/02	2
Y0DZ4MSD	02/15/02	03/01/02	2

Detected results for the samples listed above may be biased low. Where the results are nondetected, false negatives may exist.

D. Detected results and quantitation limits for the following analytes are qualified as estimated due to low relative response factors (RRFs) in the initial and continuing calibrations, and are flagged "J" in Table 1A.

- Acetone, methyl acetate, and 2-butanone in all samples, storage blank, and method blanks

- 2-Hexanone in samples Y0DZ5, Y0E02, Y0E06 and Y0DZ4MSD and method blanks VBLK76 and VBLK83

Average RRFs below the 0.05 validation criterion were observed for the analytes listed above in the initial calibration performed on January 31, 2002. RRFs below the 0.05 validation criterion were observed for the analytes listed above in the continuing calibrations performed on February 23, 2002 and March 1, 2002 (Table 2).

Detected results for the analytes listed above should be considered as the minimum values at which these analytes are present in the samples. Where the results are nondetected, false negatives may exist.

The DMCs 2-butanone-d5 and 2-hexanone-d5 also had RRFs below the 0.05 validation criterion in the initial and continuing calibrations (Table 2). The quantitation of the analytes associated with these DMCs may have been affected by the low RRFs. See Comment G for a complete listing of sample data qualified by DMC results outside of recovery criteria.

The relative response factor evaluates instrument sensitivity and is used in the quantitation of the target analytes.

E. Detected results and quantitation limits for the following analytes are qualified as estimated due to large percent relative standard deviations (RSDs) in the initial calibration, and are flagged "J" in Table 1A.

- Acetone and methylene chloride in all samples, storage blank, and method blanks

Percent RSDs exceeded the ≤30.0% validation criterion for the analytes listed above in the initial calibration performed on January 31, 2002 (Table 2).

The DMC 2-hexanone-d5 also had %RSD which exceeded the ≤30.0% validation criterion in the initial calibration (Table 2). The quantitation of the analytes associated with this DMC may have been affected by the high %RSD. See Comment G for a complete listing of sample data qualified by DMC results outside of recovery criteria.

The initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical sequence and of producing a linear calibration curve.

F. Detected results and quantitation limits for the following analytes are qualified as estimated due to large percent differences (%Ds) in the continuing calibrations, and are flagged "J" in Table 1A.

- Acetone, chloromethane, methylene chloride, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene in samples Y0E28, Y0DZ1, Y0DZ9, Y0E03, Y0E04, Y0DZ8, and Y0E01 and method blank VBLK75

- Methylene chloride in sample Y0DZ5 and method blank VBLK76

- Methylcyclohexane, isopropylbenzene, and 1,2,4-trichlorobenzene in samples Y0DZ0 and Y0DZ2 and method blank VBLK77

- Cyclohexane, methylcyclohexane, toluene, ethylbenzene, xylene (total), styrene, isopropylbenzene, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene in samples Y0E05, Y0E00, Y0DZ3, and Y0DZ6, and method blank VBLK78

- 1,2,3-Trichlorobenzene in samples Y0DZ4 and Y0DZ4MS and method blank VBLK82

Percent differences exceeded the ±30.0% validation criterion for the analytes listed above in the continuing calibrations performed on February 21, 2002, February 23, 2002 through February 25, 2002, and February 28, 2002 (Table 2).

The DMCs chloroethane-d5, 2-butanone-d5, 2-hexanone-d5, and bromoform-d also had %Ds which exceeded the ±30.0% validation criterion in the continuing calibrations (Table 2). The quantitation of the analytes associated with these DMCs may have been affected by the high %Ds. See Comment G for a complete listing of sample data qualified by DMC results outside of recovery criteria.

The continuing calibration checks the instrument performance daily and produces the relative response factors (RRFs) for target analytes that are used for quantitation.

G. Detected results and quantitation limits for the following analytes are qualified as estimated due to DMC recovery outside QC limits, and are flagged "J" in Table 1A.

{1,2-Dichloropropane-d6, toluene-d8, and trans-1,3-Dichloropropene-d4}
- Cyclohexane, methylcyclohexane, 1,2-dichloropropane, bromodichloromethane, trichloroethene, toluene, tetrachloroethene, ethylbenzene, xylenes (total), styrene, isopropylbenzene, cis-1,3-dichloropropene, trans-1,3-dichloropropene, and 1,1,2-trichloroethane in sample Y0DZ5

{1,1-Dichloroethene-d2}
- trans-1,2-Dichloroethene in sample Y0DZ6
- cis-1,2-Dichloroethene in samples Y0E05 and Y0E06

{Chloroform-d}
- 1,1-Dichloroethane and chloroform in sample Y0E00

Specific DMC recoveries which were outside the QC limits for the target analytes listed above are shown below.

Sample	DMC	%Recovery	QC Limits
Y0DZ5	1,2-Dichloropropane-d6	82	(84-123)
	Toluene-d8	76	(77-120)
	trans-1,3-Dichloropropene-d4	78	(80-128)
Y0E05	1,1-Dichloroethene-d2	240	(65-130)
Y0DZ6	1,1-Dichloroethene-d2	1300	(65-130)
Y0E06	1,1-Dichloroethene-d2	280	(65-130)
Y0E00	Chloroform-d	128	(80-123)

Detected results for affected analytes in samples Y0E05, Y0DZ6, Y0E06, and Y0E00 may be biased high; affected analytes in sample Y0DZ5 may be biased low. Where the results are nondetected, false negatives may exist. Samples were not reanalyzed.

Deuterated monitoring compounds (DMCs) are organic compounds which are similar to the target analytes in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples. All samples are spiked with DMCs prior to purging. DMCs provide information about both the laboratory performance on individual samples and the possible effects of the sample matrix on the analytical results.

H. The matrix spike and matrix spike duplicate recoveries and relative percent difference (RPD) for 1,1-dichloroethene (1,1-DCE) and trichloroethene (TCE) did not meet the criteria for accuracy and precision specified in the SOW. Since the sample concentrations (1600 μg/L and 270 μg/L, respectively) are significantly higher than the spike concentration of 50 μg/L, the recoveries and RPDs are not meaningful.

Matrix spike sample analysis provides information about the effect of the sample matrix on sample preparation and analysis.

I. In the analysis of the field duplicate pair, the following outliers were obtained for the analytes listed below.

Analyte	Y0DZ6 (D1) Conc. μg/L	Y0DZ7 (D1) Conc. μg/L	RPD (<25%)
Trichlorofluoromethane	300	34	159
1,1-Dichloroethene	350	130	92
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	34	193
Acetone	310	50U	N/A
Carbon Disulfide	0.50U	2.2L	N/A
trans-1,2-Dichloroethene	0.22L	5.0U	N/A
1,1-Dichloroethane	1.5	5.0U	N/A
1,1,1-Trichloroethane	2.0	5.0U	N/A
Trichloroethene	130	97	29
Tetrachloroethene	630	350	57

A relative percent difference (RPD) value is not calculated and is presented above as "N/A" when an analyte is detected in a sample but is nondetected (U) at the CRQL in the associated field duplicate sample, or when an analyte is detected below the CRQL in both field duplicate samples. The effect on the data quality is not known.

RPDs of 159%, 92%, 193%, 29%, and 57% were obtained for trichlorofluoromethane, 1,1-DCE, 1,1,2-trichloro-1,2,2-trifluoroethane, TCE, and tetrachloroethene (PCE), respectively, in the analysis of field duplicate samples Y0DZ6 and Y0DZ7. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix or poor sampling or laboratory technique.

J. Samples Y0DZ2, Y0DZ4, Y0DZ4MS, Y0DZ4MSD, and Y0DZ7 were analyzed at 100-fold, 10-fold, 10-fold, 10-fold, and 10-fold dilutions, respectively, due to high levels of target analytes. The CRQLs listed for these samples in Table 1A have been multiplied by the dilution factor.

K. Samples Y0DZ0, Y0DZ1, Y0DZ2 and Y0DZ7 were analyzed at dilutions due to the high levels of PCE. Results for PCE are reported from the diluted samples in Table 1A; results for all other analytes are reported from the undiluted samples.

Sample Y0DZ3 was analyzed at dilution due to the high levels of trichlorofluoromethane, 1,1-DCE, 1,1,2-trichloro-1,2,2-trifluoroethane, methyl tert-butyl ether (MTBE), and PCE. Results for these analytes are reported from the diluted sample in Table 1A; results for all other analytes are reported from the undiluted sample.

Samples Y0DZ4 and Y0E05 were analyzed at dilutions due to the high levels of trichlorofluoromethane, 1,1-DCE, 1,1,2-trichloro-1,2,2-trifluoroethane, TCE, and PCE. Results for these analytes are reported from the diluted samples in Table 1A; results for all other analytes are reported from the undiluted samples.

Sample Y0DZ6 was analyzed at dilution due to the high levels of trichlorofluoromethane, 1,1-DCE, acetone, 1,1,2-trichloro-1,2,2-trifluoroethane, TCE, and PCE. Results for these analytes are reported from the diluted sample in Table 1A; results for all other analytes are reported from the undiluted sample.

Sample Y0DZ9 was analyzed at dilution due to the high level of acetone. The result for acetone is reported from the diluted sample in Table 1A; results for all other analytes are reported from the undiluted sample.

Sample Y0E00 was analyzed at dilution due to the high levels of trichlorofluoromethane, 1,1-DCE, 1,1,2-trichloro-1,2,2-trifluoroethane, chloroform, TCE, and PCE. Results for these analytes are reported from the diluted sample in Table 1A; results for all other analytes are reported from the undiluted sample.

Sample Y0E02 was analyzed at dilution due to the high levels of trichlorofluoromethane, 1,1,2-trichloro-1,2,2-trifluoroethane, cis-1,2-DCE, TCE, and PCE. Results for these analytes are reported from the diluted sample in Table 1A; results for all other analytes are reported from the undiluted sample.

Sample Y0E06 was analyzed at dilution due to the high levels of 1,1-DCE, TCE, and PCE. Results for these analytes are reported from the diluted sample in Table 1A; results for all other analytes are reported from the undiluted sample.

L Acetone was reported in samples Y0DZ3 (64 μg/L), Y0DZ4 (110 μg/L), Y0DZ4MS (83 μg/L), Y0DZ4MSD (35 μg/L), Y0DZ6 (310 μg/L), Y0E00 (60 μg/L), Y0E02 (23 μg/L), and Y0E05 (15 μg/L). However, the presence of acetone cannot be verified by the data reviewer because of the high concentrations of Freon 113 (660 μg/L, 500 μg/L, 400 μg/L, 79 μg/L, 1000 μg/L, 18 μg/L, 140 μg/L, and 18 μg/L, respectively) in the samples.

ANALYTICAL RESULTS
Tier 3 Table 1A

Case No. : 30205 SDG No. : Y0DZ0
Site : Omega Chem OU-2
Lab : A4 SCIENTIFIC, INC.
Reviewer : Santiago Lee, ESAT/LDC
Date : May 13, 2002

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples For Volatiles

Station Location :	GW102-MW07-0041			GW102-OW1B-0116			GW301-OW1A-0080			GW102-OW6-0055			GW102-OW3-0080			GW102-OW1B-2001			GW102-0W2-0078		
Sample ID :	Y0DZ0			Y0DZ1			Y0DZ2			Y0DZ3			Y0DZ4			Y0DZ5 TB			Y0DZ6 D1		
Collection Date :	2/13/2002			2/14/2002			2/14/2002			2/15/2002			2/15/2002			2/15/2002			2/15/2002		
Dilution Factor :	1.0			1.0			100.0			1.0			10.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	0.5U			0.5U			50U		J	0.5L	J	A	5U		J	0.5U			0.5U		
Chloromethane	0.5U			0.5U	J	F	50U		J	0.5U			5U		J	0.5U			0.5U		
Vinyl Chloride	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
Bromomethane	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
Chloroethane	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
Trichlorofluoromethane	0.5L	J	A	0.4L	J	A	81		J	330		K	320		JK	0.5U			300		IK
1,1-Dichloroethene	0.5U			1			510		J	150		K	1300		JK	0.5U			350		IK
1,1,2-Trichloro-1,2,2-trifluoroethane	6			2U			46L	J	AJ	660		K	500		JK	0.5U			1000		IK
Acetone	5U	J	DE	5U	J	DEF	500U	J	DEJ	64	J	DEL	110	J	DEJL	7	J	DE	310	J	DEIKL
Carbon Disulfide	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		I
Methyl Acetate	0.5U	J	D	0.5U	J	D	50U	J	DJ	0.5U	J	D	5U	J	DJ	0.5U	J	D	0.5U	J	D
Methylene Chloride	0.5U	J	E	0.5U	J	EF	50U	J	BEJ	0.2L	J	AE	6	J	EJ	0.5U	J	EF	0.5U	J	E
trans-1,2-Dichloroethene	0.5U			0.5U			47L	J	AJ	0.5U			5U		J	0.5U			0.2L	J	AGI
Methyl tert-Butyl Ether	0.5U			0.5U			50U		J	150		K	5U		J	0.5U			0.5U		
1,1-Dichloroethane	0.5U			0.2L	J	A	47L	J	AJ	0.5U			2L	J	AJ	0.5U			2		I
cis-1,2-Dichloroethene	2			1			50U		J	0.5U			5U		J	0.5U			0.5U		
2-Butanone	5U	J	D	5U	J	D	500U	J	DJ	5U	J	D	50U	J	DJ	5U	J	D	5U	J	D
Bromochloromethane	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
Chloroform	0.5U			0.5U			270		J	2U	J	B	12U	J	BJ	0.5U			1U	J	B
1,1,1-Trichloroethane	0.5U			0.5U			1200		J	0.8			19		J	0.5U			2		I
Cyclohexane	0.5U			0.5U			50U		J	0.5U	J	F	5U		J	0.5U	J	G	0.5U	J	F
Carbon Tetrachloride	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
Benzene	0.5U			0.5U			50U		J	2			5U		J	0.5U			0.5U		
1,2-Dichloroethane	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
Trichloroethene	24			1U			1100		J	9			180		JK	0.5U	J	G	130		IK
Methylcyclohexane	0.5U	J	F	0.5U			50U	J	FJ	0.5U	J	F	5U		J	0.5U	J	G	0.5U	J	F
1,2-Dichloropropane	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U	J	G	0.5U		
Bromodichloromethane	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U	J	G	0.5U		
cis-1,3-Dichloropropene	0.5U			0.5U			50U		J	0.5U			2L	J	AJ	0.5U	J	G	0.5U		
4-Methyl-2-pentanone	5U			5U			500U		J	5U			50U		J	5U			5U		
Toluene	0.5U			0.5U			50U		J	0.5U	J	F	5U		J	0.5U	J	G	0.5U	J	F
trans-1,3-Dichloropropene	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U	J	G	0.5U		
1,1,2-Trichloroethane	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U	J	G	0.5U		
Tetrachloroethene	33		K	28		K	19000		JK	84		K	1500		JK	0.5U	J	G	630		IK
2-Hexanone	5U			5U			500U		J	5U			50U		J	5U	J	D	5U		
Dibromochloromethane	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
1,2-Dibromoethane	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		

ANALYTICAL RESULTS
Tier 3 Table 1A

Case No. : 30205 SDG No. : Y0DZ0
Site : Omega Chem OU-2
Lab : A4 SCIENTIFIC, INC.
Reviewer : Santiago Lee, ESAT/LDC
Date : May 13, 2002

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :	GW102-MW07-0041			GW102-OW1B-0116			GW301-OW1A-0080			GW102-OW6-0055			GW102-OW3-0080			GW102-OW1B-2001			GW102-0W2-0078		
Sample ID :	Y0DZ0			Y0DZ1			Y0DZ2			Y0DZ3			Y0DZ4			Y0DZ5 TB			Y0DZ6 D1		
Collection Date :	2/13/2002			2/14/2002			2/14/2002			2/15/2002			2/15/2002			2/15/2002			2/15/2002		
Dilution Factor :	1.0			1.0			100.0			1.0			10.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Chlorobenzene	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
Ethylbenzene	0.5U			0.5U			50U		J	0.5U	J	F	5U		J	0.5U	J	G	0.5U	J	F
Xylenes (total)	0.5U			0.5U			50U		J	0.5U	J	F	5U		J	0.5U	J	G	0.5U	J	F
Styrene	0.5U			0.5U			50U		J	0.5U	J	F	5U		J	0.5U	J	G	0.5U	J	F
Bromoform	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
Isopropylbenzene	0.5U	J	F	0.5U			50U	J	JF	0.5U	J	F	5U		J	0.5U	J	G	0.5U	J	F
1,1,2,2-Tetrachloroethane	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
1,3-Dichlorobenzene	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
1,4-Dichlorobenzene	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
1,2-Dichlorobenzene	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
1,2-Dibromo-3-chloropropane	0.5U			0.5U			50U		J	0.5U			5U		J	0.5U			0.5U		
1,2,4-Trichlorobenzene	0.5U	J	F	0.5U	J	F	50U	J	JF	0.5U	J	F	5U		J	0.5U			0.5U	J	F
1,2,3-Trichlorobenzene	0.5U			0.5U	J	F	50U		J	0.5U	J	F	5U	J	FJ	0.5U			0.5U	J	F

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation LImit, N/A - Not Applicable, NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank, TB - Trip Blank, BG - Background Sample
PE = Performance Evaluation Sample

ANALYTICAL RESULTS
Tier 3 Table 1A

Case No. : 30205 SDG No. : Y0DZ0
Site : Omega Chem OU-2
Lab : A4 SCIENTIFIC, INC.
Reviewer : Santiago Lee, ESAT/LDC
Date : May 13, 2002

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples For Volatiles

Station Location :	GW102-0W2-1078			GW102-0W2-2002			GW102-0W4B-0125			GW102-0W4A-0073			GW102-0W4A-4001			GW102-0W5-0048			GW102-0W15-2003		
Sample ID :	Y0DZ7	D1		Y0DZ8	TB		Y0DZ9			Y0E00			Y0E01	EB		Y0E02			Y0E03	TB	
Collection Date :	2/15/2002			2/15/2002			2/15/2002			2/15/2002			2/15/2002			2/15/2002			2/15/2002		
Dilution Factor :	10			1.0			1.0			1.0			1.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	5U	J	CJ	0.5U			0.5U			0.7			0.5U			0.5U	J	C	0.5U		
Chloromethane	5U	J	CJ	0.5U	J	F	0.5U	J	F	0.5U			0.5U	J	F	0.5U	J	C	0.5U	J	F
Vinyl Chloride	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
Bromomethane	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
Chloroethane	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
Trichlorofluoromethane	34	J	CIJ	0.5U			0.5U			18		K	0.5U			36	J	CK	0.5U		
1,1-Dichloroethene	130	J	CIJ	0.5U			0.5U			160		K	0.5U			11	J	C	0.5U		
1,1,2-Trichloro-1,2,2-trifluoroethane	34	J	CIJ	0.5U			0.6			18		K	0.5U			140	J	CK	0.5U		
Acetone	50U	J	CDEIJ	5U	J	DEF	270	J	DEFK	60	J	DEL	5U	J	DEF	23	J	CDEL	5U	J	DEF
Carbon Disulfide	2.2L	J	ACIJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
Methyl Acetate	5U	J	CDJ	0.5U	J	D	0.5U	J	D	0.5U	J	D	0.5U	J	D	0.5U	J	CD	0.5U	J	D
Methylene Chloride	5U	J	BCEJ	0.5U	J	EF	0.5U	J	EF	0.5U	J	E	0.5U	J	EF	0.5U	J	BCE	0.5U	J	EF
trans-1,2-Dichloroethene	5U	J	CIJ	0.5U			0.5U			0.5U			0.5U			3	J	C	0.5U		
Methyl tert-Butyl Ether	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
1,1-Dichloroethane	5U	J	CIJ	0.5U			0.5U			0.4L	J	AG	0.5U			0.5U	J	C	0.5U		
cis-1,2-Dichloroethene	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			32	J	CK	0.5U		
2-Butanone	50U	J	CDJ	5U	J	D	5U	J	D	5U	J	D	5U	J	D	5U	J	CD	5U	J	D
Bromochloromethane	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
Chloroform	5U	J	CJ	0.5U			0.5U			27	J	GK	0.5U			3U	J	BC	3		
1,1,1-Trichloroethane	5U	J	CIJ	0.5U			0.5U			2			0.5U			0.5U	J	C	0.5U		
Cyclohexane	5U	J	CJ	0.5U			0.5U			0.5U	J	F	0.5U			0.5U	J	C	0.5U		
Carbon Tetrachloride	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
Benzene	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
1,2-Dichloroethane	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
Trichloroethene	97	J	CIJ	0.5U			0.5U			34		K	0.5U			490	J	CK	0.5U		
Methylcyclohexane	5U	J	CJ	0.5U			0.5U			0.5U	J	F	0.5U			0.5U	J	C	0.5U		
1,2-Dichloropropane	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
Bromodichloromethane	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
cis-1,3-Dichloropropene	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.2L	J	AC	0.5U		
4-Methyl-2-pentanone	50U	J	CJ	5U			5U			5U			5U			5U	J	C	5U		
Toluene	5U	J	CJ	0.5U			0.5U			0.5U	J	F	0.5U			0.5U	J	C	0.7U	J	B
trans-1,3-Dichloropropene	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
1,1,2-Trichloroethane	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
Tetrachloroethene	350		IJK	0.5U			2			100		K	0.5U			130	J	CK	0.5U		
2-Hexanone	50U	J	CJ	5U			5U			5U			5U			5U	J	CD	5U		
Dibromochloromethane	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
1,2-Dibromoethane	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		

ANALYTICAL RESULTS
Tier 3 Table 1A

Case No. : 30205 SDG No. : Y0DZ0
Site : Omega Chem OU-2
Lab : A4 SCIENTIFIC, INC.
Reviewer : Santiago Lee, ESAT/LDC
Date : May 13, 2002

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :	GW102-0W2-1078			GW102-0W2-2002			GW102-0W4B-0125			GW102-0W4A-0073			GW102-0W4A-4001			GW102-0W5-0048			GW102-0W15-2003		
Sample ID :	Y0DZ7	D1		Y0DZ8	TB		Y0DZ9			Y0E00			Y0E01	EB		Y0E02			Y0E03	TB	
Collection Date :	2/15/2002			2/15/2002			2/15/2002			2/15/2002			2/15/2002			2/15/2002			2/15/2002		
Dilution Factor :	10			1.0			1.0			1.0			1.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Chlorobenzene	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
Ethylbenzene	5U	J	CJ	0.5U			0.5U			0.5U	J	F	0.5U			0.5U	J	C	0.5U		
Xylenes (total)	5U	J	CJ	0.5U			0.5U			0.5U	J	F	0.5U			0.5U	J	C	0.5U		
Styrene	5U	J	CJ	0.5U			0.5U			0.5U	J	F	0.5U			0.5U	J	C	0.5U		
Bromoform	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
Isopropylbenzene	5U	J	CJ	0.5U			0.5U			0.5U	J	F	0.5U			0.5U	J	C	0.5U		
1,1,2,2-Tetrachloroethane	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
1,3-Dichlorobenzene	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
1,4-Dichlorobenzene	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
1,2-Dichlorobenzene	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
1,2-Dibromo-3-chloropropane	5U	J	CJ	0.5U			0.5U			0.5U			0.5U			0.5U	J	C	0.5U		
1,2,4-Trichlorobenzene	5U	J	CJ	0.5U	J	F	0.5U	J	F	0.5U	J	F	0.5U	J	F	0.5U	J	C	0.5U	J	F
1,2,3-Trichlorobenzene	5U	J	CJ	0.5U	J	F	0.5U	J	F	0.5U	J	F	0.5U	J	F	0.5U	J	C	0.5U	J	F

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation Limit, N/A - Not Applicable, NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank, TB - Trip Blank, BG - Background Sample
PE = Performance Evaluation Sample

ANALYTICAL RESULTS
Tier 3 Table 1A

Case No. : 30205 SDG No. : Y0DZ0
Site : Omega Chem OU-2
Lab : A4 SCIENTIFIC, INC.
Reviewer : Santiago Lee, ESAT/LDC
Date : May 13, 2002

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :	GW102-MW4B-2004			GW102-MW4A-0047			GW102-MW4B-0075						GW102-OW3-0080			GW102-OW3-0080			Method Blank		
Sample ID :	Y0E04	TB		Y0E05			Y0E06			Y0E28	PE		Y0DZ4MS			Y0DZ4MSD			VBLK75		
Collection Date :	2/18/2002			2/18/2002			2/18/2002						2/15/2002			2/15/2002					
Dilution Factor :	1.0			1.0			1.0			1.0			10.0			10.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
Chloromethane	0.5U	J	F	0.5U			0.5U			0.5U	J	F	5U		J	5U	J	CJ	0.5U	J	F
Vinyl Chloride	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
Bromomethane	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
Chloroethane	0.5U			0.5U			0.5U			12			5U		J	19	J	CJ	0.5U		
Trichlorofluoromethane	0.5U			18		K	4.1			0.5U			300		J	130	J	CJ	0.5U		
1,1-Dichloroethene	0.5U			30		K	640		K	0.5U			1200		HJ	810	J	CHJ	0.5U		
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5U			18		K	2.6			19			400		J	79	J	CJ	0.5U		
Acetone	5U	J	DEF	15	J	DEL	5U	J	DE	5U	J	DEF	83	J	DEJL	35L	J	ACDEJL	5U	J	DEF
Carbon Disulfide	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
Methyl Acetate	0.5U	J	D	0.5U	J	D	0.5U	J	D	0.5U	J	D	5U	J	DJ	5U	J	CDJ	0.5U	J	D
Methylene Chloride	0.5U	J	EF	0.3L	J	AE	0.5U	J	BE	0.5U	J	EF	12	J	EJ	16U	J	BCEJ	0.5U	J	EF
trans-1,2-Dichloroethene	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
Methyl tert-Butyl Ether	0.5U			0.5U			0.3L	J	A	18			5U		J	5U	J	CJ	0.5U		
1,1-Dichloroethane	0.5U			0.3L	J	A	0.3L	J	A	0.5U			5U		J	5U	J	CJ	0.5U		
cis-1,2-Dichloroethene	0.5U			5	J	G	1.1	J	G	0.5U			5U		J	5U	J	CJ	0.5U		
2-Butanone	5U	J	D	5U	J	D	5U	J	D	5U	J	D	50U	J	DJ	50U	J	CDJ	5U	J	D
Bromochloromethane	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
Chloroform	0.5U			2			11			0.5U			9U	J	BJ	9U	J	BCJ	0.5U		
1,1,1-Trichloroethane	0.5U			0.5U			0.4L	J	A	0.5U			14		J	11	J	CJ	0.5U		
Cyclohexane	0.5U			0.5U	J	F	0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
Carbon Tetrachloride	0.5U			0.5U			0.5U			3			5U		J	5U	J	CJ	0.5U		
Benzene	0.5U			0.2L	J	A	0.3L	J	A	4			44		J	40	J	CJ	0.5U		
1,2-Dichloroethane	0.5U			0.5U			0.5U			5			5U		J	5U	J	CJ	0.5U		
Trichloroethene	0.5U			290		K	360		K	17			270		HJ	210	J	CHJ	0.5U		
Methylcyclohexane	0.5U			0.5U	J	F	0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
1,2-Dichloropropane	0.5U			0.5U			0.5U			4			5U		J	5U	J	CJ	0.5U		
Bromodichloromethane	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
cis-1,3-Dichloropropene	0.5U			0.5U			0.5U			0.5U			5U		J	2L	J	ACJ	0.5U		
4-Methyl-2-pentanone	5U			5U			5U			5U			50U		J	50U	J	CJ	5U		
Toluene	0.5U			0.5U	J	F	0.5U			9			48		J	47	J	CJ	0.3L	J	A
trans-1,3-Dichloropropene	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
1,1,2-Trichloroethane	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
Tetrachloroethene	0.5U			82		K	700		K	11			1500		J	1100	J	CJ	0.5U		
2-Hexanone	5U			5U			5U	J	D	5U			50U		J	50U	J	CDJ	5U		
Dibromochloromethane	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
1,2-Dibromoethane	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		

ANALYTICAL RESULTS
Tier 3 Table 1A

Case No.: 30205 SDG No.: Y0DZ0
Site: Omega Chem OU-2
Lab: A4 SCIENTIFIC, INC.
Reviewer: Santiago Lee, ESAT/LDC
Date: May 13, 2002

QUALIFIED DATA
Concentration in ug/L

Analysis Type: Low Level Water Samples
For Volatiles

Station Location:	GW102-MW4B-2004			GW102-MW4A-0047			GW102-MW4B-0075						GW102-OW3-0080			GW102-OW3-0080			Method Blank		
Sample ID:	Y0E04	TB		Y0E05			Y0E06			Y0E28	PE		Y0DZ4MS			Y0DZ4MSD			VBLK75		
Collection Date:	2/18/2002			2/18/2002			2/18/2002						2/15/2002			2/15/2002					
Dilution Factor:	1.0			1.0			1.0			1.0			10.0			10.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Chlorobenzene	0.5U			0.5U			0.5U			6			57		J	55	J	CJ	0.5U		
Ethylbenzene	0.5U			0.5U	J	F	0.5U			7			5U		J	5U	J	CJ	0.5U		
Xylenes (total)	0.5U			0.5U	J	F	0.5U			14			5U		J	5U	J	CJ	0.5U		
Styrene	0.5U			0.5U	J	F	0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
Bromoform	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
Isopropylbenzene	0.5U			0.5U	J	F	0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
1,1,2,2-Tetrachloroethane	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
1,3-Dichlorobenzene	0.5U			0.5U			0.5U			2			5U		J	5U	J	CJ	0.5U		
1,4-Dichlorobenzene	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
1,2-Dichlorobenzene	0.5U			0.5U			0.5U			9			5U		J	5U	J	CJ	0.5U		
1,2-Dibromo-3-chloropropane	0.5U			0.5U			0.5U			0.5U			5U		J	5U	J	CJ	0.5U		
1,2,4-Trichlorobenzene	0.5U	J	F	0.5U	J	F	0.5U			0.5U	J	F	5U		J	5U	J	CJ	0.5U	J	F
1,2,3-Trichlorobenzene	0.5U	J	F	0.5U	J	F	0.5U			6	J	F	5U	J	FJ	5U	J	CJ	0.5U	J	F

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation Limit, N/A - Not Applicable, NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank, TB - Trip Blank, BG - Background Sample
PE = Performance Evaluation Sample

ANALYTICAL RESULTS
Tier 3 Table 1A

Case No.: 30205 SDG No.: Y0DZ0
Site: Omega Chem OU-2
Lab: A4 SCIENTIFIC, INC.
Reviewer: Santiago Lee, ESAT/LDC
Date: May 13, 2002

QUALIFIED DATA
Concentration in ug/L

Analysis Type: Low Level Water Samples
For Volatiles

Station Location:	Method Blank			Method Blank			Method Blank			Method Blank			Method Blank			Method Blank			Storage Blank		
Sample ID:	VBLK76			VBLK77			VBLK78			VBLK82			VBLK83			VBLK84			VHBLK01		
Collection Date:																					
Dilution Factor:	1.0			1.0			1.0			1.0			1.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Chloromethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Vinyl Chloride	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Bromomethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Chloroethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Trichlorofluoromethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,1-Dichloroethene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Acetone	5U	J	DE	5U	J	DE	5U	J	DE	5U	J	DE	5U	J	DE	5U	J	DE	5U	J	DE
Carbon Disulfide	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Methyl Acetate	0.5U	J	D	0.5U	J	D	0.5U	J	D	0.5U	J	D	0.5U	J	D	0.5U	J	D	0.5U	J	D
Methylene Chloride	0.5U	J	EF	0.3L	J	AE	0.5U	J	E	0.5U	J	E	0.6	J	E	0.2L	J	AE	0.5U	J	BE
trans-1,2-Dichloroethene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Methyl tert-Butyl Ether	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,1-Dichloroethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
cis-1,2-Dichloroethene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
2-Butanone	5U	J	D	5U	J	D	5U	J	D	5U	J	D	5U	J	D	5U	J	D	5U	J	D
Bromochloromethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Chloroform	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,1,1-Trichloroethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Cyclohexane	0.5U			0.5U			0.5U	J	F	0.5U			0.5U			0.5U			0.5U		
Carbon Tetrachloride	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Benzene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,2-Dichloroethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Trichloroethene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Methylcyclohexane	0.5U			0.5U	J	F	0.5U	J	F	0.5U			0.5U			0.5U			0.5U		
1,2-Dichloropropane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Bromodichloromethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
cis-1,3-Dichloropropene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
4-Methyl-2-pentanone	5U			5U			5U			5U			5U			5U			5U		
Toluene	0.5U			0.5U			0.5U	J	F	0.5U			0.5U			0.5U			0.5U		
trans-1,3-Dichloropropene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,1,2-Trichloroethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Tetrachloroethene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
2-Hexanone	5U	J	D	5U			5U			5U			5U	J	D	5U			5U		
Dibromochloromethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,2-Dibromoethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		

ANALYTICAL RESULTS
Tier 3 Table 1A

Case No. : 30205 SDG No. : Y0DZ0
Site : Omega Chem OU-2
Lab : A4 SCIENTIFIC, INC.
Reviewer : Santiago Lee, ESAT/LDC
Date : May 13, 2002

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :	Method Blank			Method Blank			Method Blank			Method Blank			Method Blank			Method Blank			Storage Blank		
Sample ID :	VBLK76			VBLK77			VBLK78			VBLK82			VBLK83			VBLK84			VHBLK01		
Collection Date :																					
Dilution Factor :	1.0			1.0			1.0			1.0			1.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Chlorobenzene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Ethylbenzene	0.5U			0.5U			0.5U	J	F	0.5U			0.5U			0.5U			0.5U		
Xylenes (total)	0.5U			0.5U			0.5U	J	F	0.5U			0.5U			0.5U			0.5U		
Styrene	0.5U			0.5U			0.5U	J	F	0.5U			0.5U			0.5U			0.5U		
Bromoform	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
Isopropylbenzene	0.5U			0.5U	J	F	0.5U	J	F	0.5U			0.5U			0.5U			0.5U		
1,1,2,2-Tetrachloroethane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,3-Dichlorobenzene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,4-Dichlorobenzene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,2-Dichlorobenzene	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,2-Dibromo-3-chloropropane	0.5U			0.5U			0.5U			0.5U			0.5U			0.5U			0.5U		
1,2,4-Trichlorobenzene	0.5U			0.5U	J	F	0.5U	J	F	0.5U			0.5U			0.5U			0.5U		
1,2,3-Trichlorobenzene	0.5U			0.5U			0.5U	J	F	0.5U	J	F	0.5L	J	A	0.3L	J	A	0.5U		

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation Limit, N/A - Not Applicable, NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank, TB - Trip Blank, BG - Background Sample
PE = Performance Evaluation Sample

ANALYTICAL RESULTS
Tier 3 Table 1A

Case No.: 30205 SDG No.: Y0DZ0
Site: OMEGA RECOVERY SERV.
Lab: A4 SCIENTIFIC, INC.
Reviewer: Santiago Lee, ESAT/LDC
Date: May 13, 2002

QUALIFIED DATA
Concentration in ug/L

Analysis Type: Low Level Water Samples
For Volatiles

Station Location:																					
Sample ID:	CRQL																				
Collection Date:																					
Dilution Factor:																					
Volatile Compound	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
Dichlorodifluoromethane	0.5																				
Chloromethane	0.5																				
Vinyl Chloride	0.5																				
Bromomethane	0.5																				
Chloroethane	0.5																				
Trichlorofluoromethane	0.5																				
1,1-Dichloroethene	0.5																				
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5																				
Acetone	5																				
Carbon Disulfide	0.5																				
Methyl Acetate	0.5																				
Methylene Chloride	0.5																				
trans-1,2-Dichloroethene	0.5																				
Methyl tert-Butyl Ether	0.5																				
1,1-Dichloroethane	0.5																				
cis-1,2-Dichloroethene	0.5																				
2-Butanone	5																				
Bromochloromethane	0.5																				
Chloroform	0.5																				
1,1,1-Trichloroethane	0.5																				
Cyclohexane	0.5																				
Carbon Tetrachloride	0.5																				
Benzene	0.5																				
1,2-Dichloroethane	0.5																				
Trichloroethene	0.5																				
Methylcyclohexane	0.5																				
1,2-Dichloropropane	0.5																				
Bromodichloromethane	0.5																				
cis-1,3-Dichloropropene	0.5																				
4-Methyl-2-pentanone	5																				
Toluene	0.5																				
trans-1,3-Dichloropropene	0.5																				
1,1,2-Trichloroethane	0.5																				
Tetrachloroethene	0.5																				
2-Hexanone	5																				
Dibromochloromethane	0.5																				
1,2-Dibromoethane	0.5																				

ANALYTICAL RESULTS
Tier 3 Table 1A

Case No. : 30205 SDG No. : Y0DZ0
Site : OMEGA RECOVERY SERV.
Lab : A4 SCIENTIFIC, INC.
Reviewer : Santiago Lee, ESAT/LDC
Date : May 13, 2002

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :																				
Sample ID :	CRQL																			
Collection Date :																				
Dilution Factor :																				
Volatile Compound	**Result**	**Val**	**Com**											**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Chlorobenzene	0.5																			
Ethylbenzene	0.5																			
Xylenes (total)	0.5																			
Styrene	0.5																			
Bromoform	0.5																			
Isopropylbenzene	0.5																			
1,1,2,2-Tetrachloroethane	0.5																			
1,3-Dichlorobenzene	0.5																			
1,4-Dichlorobenzene	0.5																			
1,2-Dichlorobenzene	0.5																			
1,2-Dibromo-3-chloropropane	0.5																			
1,2,4-Trichlorobenzene	0.5																			
1,2,3-Trichlorobenzene	0.5																			

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation LImit, N/A - Not Applicable, NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank, TB - Trip Blank, BG - Background Sample
PE = Performance Evaluation Sample

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR ORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared according to the document, "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," February 1994.

U	The analyte was analyzed for but was not detected above the reported sample quantitation limit.
L	Indicates results which fall below the Contract Required Quantitation Limit. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Table 2
Calibration Summary

Case No.: 30205 SDG No.: Y0DZ0
Site: Omega Chem OU-2
Laboratory: A4 Scientific
Reviewer: Santiago Lee, ESAT/LDC
Date: May 13, 2002

RELATIVE RESPONSE FACTORS

	$\overline{\text{RRF}}$	RRF	RRF	RRF	RRF	RRF	RRF	RRF
Analysis Date:	01/31/02	02/21/02	02/23/02	02/24/02	02/25/02	02/28/02	03/01/02	03/02/02
Analysis Time:	0928-1147	1446	1224	1328	1415	1917	1018	0827
GC/MS I.D.:	C-5973	C-5973	C-5973	C-5973	C-5973	C-5973	C-5973	C-5973
Analyte	Init.	Cont.	Cont.	Cont.	Cont.	Cont.	Cont.	Cont.
Acetone	0.022	0.015	0.017	0.020	0.023	0.025	0.020	0.025
Methyl Acetate	0.044	0.037	0.034	0.042	0.047	0.040	0.043	0.044
2-Butanone	0.024	0.022	0.021	0.024	0.028	0.025	0.023	0.028
2-Hexanone	-----	-----	0.044	-----	-----	------	0.049	-----
2-Butanone-d5	0.027	0.021	0.019	0.020	0.021	0.018	0.019	0.020
2-Hexanone-d5	0.027	0.025	0.020	0.020	0.020	0.018	0.020	0.020

PERCENT RELATIVE STANDARD DEVIATIONS

	%RSD
Analysis Date:	01/31/02
Analysis Time:	0928-1147
GC/MS I.D.:	C-5973
Analyte	Init.
Acetone	32.6
Methylene Chloride	41.0
2-Hexanone-d5	33.1

PERCENT DIFFERENCES

	%D	%D	%D	%D	%D	%D	%D
Analysis Date:	02/21/02	02/23/02	02/24/02	02/25/02	02/28/02	03/01/02	03/02/02
Analysis Time:	1446	1224	1328	1415	1917	1018	0827
GC/MS I.D.:	C-5973	C-5973	C-5973	C-5973	C-5973	C-5973	C-5973
Analyte	Cont.	Cont.	Cont.	Cont.	Cont.	Cont.	
Acetone	-31.8	----	----	----	----	----	----
Chloromethane	-30.5	----	----	----	----	----	----
Methylene Chloride	-34.1	-37.3	----	----	----	----	----
1,2,4-Trichlorobenzene	+33.4	----	+31.1	+39.0	----	----	----
1,2,3-Trichlorobenzene	+32.3	----	----	+34.7	-31.0	----	----
Methylcyclohexane	----	----	+31.9	+38.1	----	----	----
Isopropylbenzene	----	----	+30.5	+43.2	----	----	----
Cyclohexane	----	----	----	+39.6	----	----	----
Toluene	----	----	----	+30.2	----	----	----
Ethylbenzene	----	----	----	+31.2	----	----	----
Xylene (total)	----	----	----	+30.2	----	----	----
Styrene	----	----	----	+36.2	----	----	----
Chloroethane-d5	-31.8	----	----	----	----	----	----
2-Butanone-d5	----	----	----	----	-33.3	----	----
2-Hexanone-d5	----	----	----	----	-33.3	----	----
Bromoform-d	----	----	----	----	-30.6	----	----

- = biased low ; + = biased high

ASSOCIATED SAMPLES AND METHOD BLANKS

Init. 01/31/02: All samples, storage blank, and method blanks.
Cont. 02/21/02: Y0E28, Y0DZ1, Y0DZ9, Y0E03, Y0E04, Y0DZ1DL, Y0DZ8, Y0E01, Y0DZ9DL, and VBLK75
Cont. 02/23/02: Y0DZ5, Y0DZ3DL, Y0DZ4DL, Y0E06DL, and VBLK76
Cont. 02/24/02: Y0DZ7DL, Y0DZ0DL, Y0DZ6DL, Y0E00DL, Y0DZ2DL, Y0DZ0, Y0DZ2, and VBLK77
Cont. 02/25/02: Y0E05DL, Y0E05, Y0E00, Y0DZ3, Y0DZ6, and VBLK78
Cont. 02/28/02: Y0DZ4, Y0DZ4MS, and VBLK82
Cont. 03/01/02: Y0E02, Y0E02DL, Y0DZ4MSD, Y0E06, and VBLK83
Cont. 03/02/02: Y0DZ7, VHBLK01, and VBLK84

1LCF

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
Y0DZ0

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0

Lab Sample ID: 1365.002 Date Received: 02/16/2002

Lab File ID: C3477 Date Analyzed: 02/24/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 1

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	000076-12-0	Ethane, 1,1,2,2-tetrachloro-	7.68	5.8	JN
02		1,2-difluoro-			
03					
04		SL, 4/9/02.			
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

1LCF

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
Y0DZ1

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0

Lab Sample ID: 1365.003 Date Received: 02/16/2002

Lab File ID: C3430 Date Analyzed: 02/21/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 2

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		~~UNKNOWN~~ Dichlorotrifluoroethane	3.59	0.87	J
02		UNKNOWN	15.36	0.92	J
03		SL, 4/9/02.			
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Y0DZ2

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0

Lab Sample ID: 1365.004 Date Received: 02/16/2002

Lab File ID: C3480 Date Analyzed: 02/24/2002

Purge Volume: 25 (ML) Dilution Factor: 100.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 1

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		UNKNOWN	17.43	88	J
02					
03					
04					
05					
06					
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Y0DZ3

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0

Lab Sample ID: 1367.001 Date Received: 02/19/2002

Lab File ID: C3492 Date Analyzed: 02/25/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 15

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	000078-78-4	Butane, 2-methyl-	3.03	1.7	JN
02		~~UNKNOWN~~ Dichlorotrifluoroethane	3.59	41	J
03		UNKNOWN	4.48	1.7	J
04		UNKNOWN	5.64	0.55	J
05		UNKNOWN	5.75	1.0	J
06		UNKNOWN	5.86	0.59	J
07		UNKNOWN	7.05	2.1	J
08	000076-12-0	Ethane, 1,1,2,2-tetrachloro-	7.68	1.3	JN
09		UNKNOWN 1,2-difluoro-	8.61	2.1	J
10		UNKNOWN	8.78	6.8	J
11	000135-98-8	Benzene, (1-methylpropyl)-	15.39	9.3	JN
12	000527-84-4	Benzene, 1-methyl-2-(1-methy	16.03	1.2	JN
13		UNKNOWN lethyl-	17.23	7.8	J
14		UNKNOWN	17.71	0.59	J
15	017057-82-8	1H-Indene, 2,3-dihydro-1,2-d	18.26	0.56	JN
16					
17		SC. 4/9/02.			
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Y0DZ4

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0

Lab Sample ID: 1367.002 Date Received: 02/19/2002

Lab File ID: C3550 Date Analyzed: 03/01/2002

Purge Volume: 25 (ML) Dilution Factor: 10.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 2

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		UNKNOWN	3.67	14	J
02	000076-12-0	Ethane, 1,,1,2,2-tetrachloro	7.86	11	JN
03		-1,2-difluoro-			
04					
05		SL 4/9/02.			
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Y0DZ6

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0

Lab Sample ID: 1367.003 Date Received: 02/19/2002

Lab File ID: C3495 Date Analyzed: 02/25/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 4

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		~~UNKNOWN~~ Dichlorotrifluoroethane	3.59	11	J
02		~~UNKNOWN~~	3.67	12	J
03	000076-12-0	Ethane, 1,1,2,2-tetrachloro-	7.68	5.8	JN
04		UNKNOWN 1,2-difluoro-	11.11	0.50	J
05					
06		SC 4/9/02.			
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Y0DZ8 = TB,

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0 SC, 4/9/02.

Lab Sample ID: 1367.005 Date Received: 02/19/2002

Lab File ID: C3442 Date Analyzed: 02/21/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 1

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	000091-20-3	Naphthalene	19.76	0.51	JN
02					
03					
04					
05					
06					
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Y0DZ9

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0

Lab Sample ID: 1367.006 Date Received: 02/19/2002

Lab File ID: C3432 Date Analyzed: 02/21/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 1

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		UNKNOWN	4.06	1.2	J
02					
03					
04					
05					
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Y0E00

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0

Lab Sample ID: 1367.007 Date Received: 02/19/2002

Lab File ID: C3489 Date Analyzed: 02/25/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 3

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		~~UNKNOWN~~ dichlorotrifluoroethane	3.59	2.0	J
02		~~UNKNOWN~~	3.65	6.0	J
03	000076-12-0	ethane, 1,1,2,2-tetrachloro-	7.68	2.4	JN
04					
05		SL, 4/9/02,			
06					
07					
08					
09					
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Y0E02

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0

Lab Sample ID: 1367.009 Date Received: 02/19/2002

Lab File ID: C3562 Date Analyzed: 03/01/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 2

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		~~UNKNOWN~~ Trichlorotrifluoroethane	3.59	0.55	J
02		~~UNKNOWN~~	3.66	0.73	J
03					
04		sc, 4/9/02			
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Y0E03 = TB.

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0 SL, 4/9/02.

Lab Sample ID: 1367.010 Date Received: 02/19/2002

Lab File ID: C3434 Date Analyzed: 02/21/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 2

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		UNKNOWN	5.01	0.52	J
02		UNKNOWN	5.75	1.0	J
03					
04					
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Y0E05

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0

Lab Sample ID: 1367.012 Date Received: 02/19/2002

Lab File ID: C3486 Date Analyzed: 02/25/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 2

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		~~UNKNOWN~~ Dichlorotrifluoroethane	3.58	0.77	J
02		~~UNKNOWN~~	3.65	0.91	J
03					
04					
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LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Y0E28

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30205 Client No.: SDG No.: Y0DZ0

Lab Sample ID: 1358.001 Date Received: 02/15/2002

Lab File ID: C3429 Date Analyzed: 02/21/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 2

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01	000095-47-6	Benzene, 1,2-dimethyl-	12.78	3.5	JN
02	000124-18-5	Decane	14.45	8.8	JN
03					
04					
05					
06					
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